**Warm Up**

Unit 2 Day 1

Bob builds tool sheds. He uses 10 sheets of dry wall and 15 studs for a small shed and 15 sheets of dry wall and 45 studs for a large shed. He has available 60 sheets of dry wall and 135 studs. If Bob makes $390 profit on a small shed and $520 on a large shed, how many of each type of building should Bob build to maximize his profit?

Let *s* represent the number of small sheds and  represent the number of large sheds. Then the constraints upon this problem are the following:

